CITY OF ROCKVILLE
ROCKVILLE, MARYLAND
ADDENDUM NO. 1
IFB 47-15

WATER TREATMENT CHEMICALS

ATTENTION ALL BIDDERS: This addendum is issued to clarify, add to, delete from, correct and/or change the bid documents to the extent indicated and is hereby made a part of the said bid documents. Bidders are required to acknowledge receipt of the addendum by signing in the appropriate space below. Failure to do so may subject your quote to disqualification. The addendum may also be downloaded from the City's website at: www.rockvillemd.gov.

The following questions in bold red have been rendered for IFB 47-15, and answered in bold blue.

1. **On page 23 of 35 the price page indicates item number 3, polyaluminum hydroxychlorosulfate as 50 tons. On page 20 of 35 the aluminum concentration is expressed as Al2O3 %. We do not want to make an incorrect assumption; so, could you please clarify the type of tons such as - wet tons, or dry tons as Al2O3? The type of tons referred to are dry tons.**

2. **On the previous chemical bid back in 2010, addendum #3 was put out adding Kemira PAX XL8 as an approved product. On page 20 of 35, PAX XL8 is not noted this time around. On page 7 of 35 #17 it states Bidders may offer any brand which meets or exceeds the specification unless "Brand name only" is specified. Please clarify if PAX XL8 would be approved this time around or would be considered for use at the water treatment plant. DelPac 2500 is the primary water treatment chemical used in the coagulation process at the City of Rockville Water Treatment Plant. DelPac 2500 is the only approved product, per Section B.1.**

The following chemicals and their perspective scope of work have been added to IFB 47-15. These chemicals shall be included in your bid for IFB 47-15.

5. **CAUSTIC SODA**

A. General Specifications

1. This liquid chemical is to contain approximately 25% anhydrous sodium hydroxide, NaOH. This chemical shall have a specific gravity of approximately 1.25 and have a freezing point of approximately -15 to -10 degrees Fahrenheit.

2. This liquid chemical shall not have a temperature in excess of 104^0 F upon delivery unless a higher temperature is approved by the Water Treatment Plant Superintendent.

3. This liquid chemical shall comply with NSF Standard 60 and AWWA Standard for 25 Caustic, B501-03 or latest revision.

B. Packaging and Delivery

1. Bulk deliveries shall be normally in truckloads of 3,000 to 5,000 gallons per load. The water plant is currently constructing new bulk chemical storage facilities. Temporary bulk storage facilities are in place. The current delivery is 700-1000 gallons per load. New chemical facilities are scheduled to be complete December 2015. Normal delivery quantities will then resume after completion of the new facilities.

2. Deliveries must be done in tank type trucks and unloaded by a self-contained conveyance system into the Water Treatment Plant's temporary 1,000-galion tank. If the contractor's truck requires additional types of connections, other than what is in place, the contractor must provide the required connection and remove after each delivery. After construction of the new bulk chemical storage facility is complete, deliveries will be unloaded into two (2) 9,000 gallon tanks.

2. The contractor shall furnish a table showing the percentage of Na20 and NaOH for different specific gravity readings. The City may use this table to determine the Na2O and NaOH concentrations for some or all of the deliveries.

C. Delivery Location

1. All deliveries will be made to the City of Rockville's Water Treatment Plant, 10930 Sandy Landing Road, Potomac, MD 20854.

D. Quantity

1. The Water Treatment Plant's annual estimated usage is approximately 70 tons.

E. Payment Calculation

1. Payments will be made in accordance with the following calculation formula:

Dry Tons = (WxC) / (2000 x 0.76)

(VV) is equivalent to weight per pound and (C) is the concentration of the Na2O.

6. CHLORINE

A. General Specifications

1. Liquid chlorine delivered shall be chemically pure anhydrous, 99.5 by volume free chlorine, free from impurities which may cause hazards or stoppages in the operation of the standard chlorination equipment. The material shall comply with AWWA Standards for Liquid Chlorine B301-04 including quality and test procedures.

B. Packaging and Delivery

1. The liquid chlorine must be delivered in 1-ton containers and delivered in open trucks suitable for unloading by overhead cranes that are to be operated by the City of Rockville Water Treatment Plant Operators only.

2. Containers must conform to all current U.S. Department of Transportation Regulations Part 179. Contractor shall adhere to the recommendations set forth by the Chlorine Institute's Pamphlet 17, *Packaging Plant Safety and Operational Guidelines* for receiving, inspecting, testing, and reconditioning cylinders, valves, and fusible plugs.

3. Empty chlorine containers must be picked up when full containers are delivered by the contractor. No deposit fees for the containers will be charged.

4. Valve should fit a standard wrench of 3/8" for standard operation of main tank, yoke, and manifold valve.

5. Main tank valve must be 25-30 foot pounds torque pressure.

6. Valves shall be of the type approved by the Chlorine Institute as standard for one-ton container valves and shall be thoroughly inspected and tested at the filling plant before shipping. Each valve must have between three to ten valve threads showing above the container head. There must be adequate clearance between the valve outlet and the container head to allow the installation of standard, direct-mounting vacuum regulators, which have integral drip-legs.

7. Tightening of container valves shall have valves the can be opened by hand using only a 3/8" square box wrench, six inches in length, without the need for extensions or other tools. Additionally, three suitable lead washers shall be included with each container to use when connecting the flexible connector between the container valve and the manifold valve. The washer dimensions must be 34/65" I.D. X 15116" O.D. X 1/16" thick.

8. If containers are repaired, the repair must meet the DOT regulations Part 179 and be in conformance with the guidelines and procedures found in AARTC Specification #M1002 as published by the Associated American Railroad Tank Car Committee. Repairs shall be made by an AARTC approved repair shop. Valves and fusible plugs must be clean and free of scale or other surface irregularities and modifications that may prevent standard Chlorine container repair kit parts from being affective. The valves and fusible plugs must be located and installed in a manner to permit use of the appropriate standard Chlorine Institute Container Repair Kit in order to effectively contain a leak in the event one occurs. Repaired containers shall be inspected at the filling plant and shall be clean and dry before filling occurs. All containers shall be painted a heat reflecting color.

C. Delivery Location
1. All deliveries will be made to the City of Rockville's Water Treatment Plant, 10930 Sandy Landing Road, Potomac, MD 20854.

D. Quantity
1. The Water Treatment Plant's annual estimated usage is 30 tons of liquid chlorine.

7. HYDROFLUOSILICIC ACID

A. General Specifications
1. Hydrofluosilicic Acid is a direct additive used in the treatment of drinking water and must be approved as suitable by an accredited certification organization in accordance with ANSI/NSF Standard 60.

2. The hydrofluoric acid content in the Hydrofluosilicic Acid shall not exceed 1% and shall be not less than 23% solution hydrofluosilicic acid, H2SiF6. Content of this chemical shall be determined by the method designated in Method 5 of the Standard for Fluorosilicic Acid, B703-06, by the American Water Works Association.

3. The hydrofluosilicic acid must be free of suspended matter and shall be from colorless to no more than straw yellow in color. Straw yellow color shall be determined as a material with maximum 100 units in accordance with method 2120B, visual comparison method.

B. Packaging and Delivery
1. Bulk deliveries shall be by truckloads of 3,000 to 5,000 gallons per load.

2. Deliveries must be done in tank type trucks and unloaded by a self-contained conveyance system into the Water Treatment Plant's 5,000-gallon tank. If the contractor's truck requires additional types of connections, other than what is in place, the contractor must provide the required connection and remove after each delivery.

3. Contractor shall furnish a chart stating the percentage of H2SiF6 for different specific gravity readings. The City, at its option, may use this chart to determine the H2SiF6 concentrations for some or all of the deliveries.

C. Delivery Location
1. All deliveries will be made to the City of Rockville's Water Treatment Plant, 10930 Sandy Landing Road, Potomac, MD 20854.

D. Quantity
1. The Water Treatment Plant's annual estimated usage is 24 tons of hydrofluosilicic acid.

E. Payment Calculation
1. Payments will be made in accordance with the following calculation formula:

Wet Tons of 23 Hydrofluosilicic Acid = (WxC)/
(2000x0.23) W = Net Wet Lbs. Of Hydrofluosilicic
Acid per shipment
C = Actual % concentration of H2SiF6 per shipment (in decimal form)

If no concentration is indicated on the packaging or delivery ticket, a concentration of 23% will be used to calculate the cost unless the City's tests the concentration and the results are lower, in which case the City's concentration level would be used.
If the Contractor's delivery ticket references a range of concentration, the lower end of the range will be used unless the City's test results indicate a value that is 1.0 or more below the concentration shown on the delivery ticket, the City's results would be used. The wet tons will be rounded to the nearest 0.01 ton, W to the nearest 10 pounds, and C to the nearest 0.01%. Standard rounding procedures apply: > 5 round up, < 5 round down.

8. POTASSIUM PERMANGANATE

A. General Specifications

1. Potassium Permanganate is a direct additive used in the drinking water and must be approved as suitable by an accredited certification organization in accordance with ANSI/NSF Standard 60.

2. The Potassium Permanganate shall be in granular form and have the following characteristics:

- Shall not be less than 96.5% KMnO4 by weight
- Bulk density approximately 100 Ib/cubic foot and relatively dust-free in handling
- Solubility - 54/1bs/100 gal at 20°C
- Settling rate - 1 It/second
- Dissolution rate - 1 gram/hour
- Free-flowing grade with KMn04 content of 96.5% or higher
- Specific gravity equal to 1.039 of a 6% solution by weight, at 68°F/20°C
- Stable in storage for at least three years

B. Packaging and Delivery

1. Deliveries shall be made in 55-lb pails. The pails shall be ICC approved, non-returnable, high density, polyethylene with full open tops, twist off lids, removable labels and NSF certified.

2. Pails shall be delivered by truck and on pallets. No deposit fees shall be charged for pails or pallets.

3. Contractor shall furnish a table showing the percentage of KMnO4 for different specific gravity readings. The City has the option to use the table to determine KMnO4 concentrations for some or all deliveries.

C. Delivery Location

1. All deliveries will be made to the City of Rockville's Water Treatment Plant, 10930 Sandy Landing Road, Potomac, MD 20854.

D. Quantity

1. The Water Treatment Plant's annual estimated usage is 72 pails per year.

The following Bid Proposal Form has been revised in IFB 47-15.

CITY OF ROCKVILLE
ROCKVILLE, MARYLAND
BID PROPOSAL FORM
IFB# 47-15

IN ACCORDANCE WITH ALL TERMS, SPECIFICATIONS AND REQUIREMENTS, WE PROPOSE TO FURNISH ALL LABOR, EQUIPMENT, MATERIALS AND SERVICES TO PERFORM ALL WORK NECESSARY TO FURNISH AND DELIVER WATER TREATMENT CHEMICALS. BIDDERS MUST BID ALL ITEMS.

BASE PERIOD: From time of award – 6-30-2016

ITEM NUMBER	CHEMICAL NAME	PKG	UNIT PRICE		EST. ANNUAL USAGE	TOTAL
1	NON-IONIC POLYMER	DRUMS (55 GAL)	$	X	24 DRUMS	$ (A)
2	POLYALUMINUM HYDROXYCHLOROSULFATE	TON	$	X	50 TONS	$ (B)
3	POLYPHOSPHATE (C-5)	TON	$	X	30 TONS	$ (C)
4	SODIUM HYPOCHLORITE	PAIL (50 lb.)	$	X	300 PAILS	$ (D)
5	CAUSTIC SODA	TON	$	X	70 TONS	$ (E)
6	CHLORINE	TON	$	X	30 TONS	$ (F)
7	HYDROFLUOSILICIC ACID	TON	$	X	24 TONS	$ (G)
8	POTASSIUM PERMANGANATE	PAIL (55 lb.)	$	X	72 PAILS	$ (H)
					GRAND TOTAL A THRU H	$

The following date due change in bold red has been made for IFB 47-15.

ALL BIDS ARE NOW DUE 8-4-15 BY 2PM

ALL OTHER TERMS AND CONDITIONS SHALL REMAIN THE SAME.
ISSUED BY: JESSIE J. WOODS, BUYER I, 7-22-15

ACKNOWLEDGE RECEIPT OF ADDENDUM NO. 1 BY SIGNING BELOW AND RETURNING A COPY OF THE ADDENDUM WITH YOUR PROPOSAL.

NAME OF BIDDER: _____

DATE: _____

SIGNATURE: _____